

# Summary of Changes

**HRG4+ 2019/20 Local Payment Grouper**  
from:  
**HRG4+ 2018/19 Local Payment Grouper**

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## Purpose

The purpose of this summary is to provide an overview of the main changes between the HRG4+ 2019/20 Local Payment Grouper and the HRG4+ 2018/19 Local Payment Grouper.<sup>1</sup>

Changes are broken down by:

- **Grouper Input Changes**
- **Grouper Output Changes**
- **Grouper Software Changes**
- **HRG Design Changes**

This document also includes a high-level description of design changes by subchapter as well as HRG distribution by subchapter, in Appendix A.

This document is intended as a high-level summary to be used to form the basis of further analysis and investigation rather than as a comprehensive list of all differences between grouper releases. Further HRG4+ supporting documentation is available from the National Casemix Office website: <https://digital.nhs.uk/services/national-casemix-office/downloads-groupers-and-tools/payment-groupers>.

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<sup>1</sup> The HRG4+ 2018/19 Local Payment Grouper has the same design as the HRG4+ 2017/18 Local Payment Grouper, in support of the two-year National Tariff for the financial years 2017/18 and 2018/19.

## Changes to the HRG4+ Grouper

The following changes have been implemented between the HRG4+ 2018/19 Local Payment Grouper and the HRG4+ 2019/20 Local Payment Grouper.

### Grouper Input Changes

#### Admitted Patient Care

In the Admitted Patient Care dataset, the fields PROCODET and PROVSPNO have been made mandatory to ensure that spells are correctly created using the fields PROCODET, PROVSPNO and EPIORDER, and grouped appropriately.

If either PROCODET and/or PROVSPNO are left blank when using Batch grouping, HRG **UZ01Z Data Invalid for Grouping** will be generated at both episode and spell level.

If either PROCODET and/or PROVSPNO are left blank when using Single Spell, an error message will be produced indicating the fields are blank and no outputs will be generated until a value is entered. In Single Spell, an error message will also be produced if either PROCODET and/or PROVSPNO are inconsistent within a multi-episode spell. Again, no outputs will be generated until this is corrected.

#### Paediatric Critical Care

A cosmetic correction has been made to the input field DIAG\_01 in the Paediatric Critical Care Minimum Data Set within Single Spell. This field is no longer in bold (mandatory) to indicate it is optional for a value to be entered.

### Grouper Output Changes

#### Specialised Service Codes

Specialised Service Codes (SSCs) are no longer output by the Grouper. The output fields, however, have been retained for this release but will no longer be populated.

### Grouper Software Changes

The following changes apply to the Graphical User Interface (GUI):

#### Single Spell

A new “Reset” button has been introduced next to the “Undo” and “Redo” buttons within Single Spell that allows the user to reset the Single Spell input fields to the default values.

In addition to the new reset button, an existing warning message within the Grouper has been extended to Single Spell, meaning that where a user tries to load an RDF in Single Spell and one of the mandatory fields is missing in the RDF, a warning message is generated stating “RDF does not contain the required fields. Do you wish to use the RDF editor?”. If “Yes” is selected, the user is taken to the RDF editor. If “No” is selected, the user will see a blank Single Spell window with just the invalid RDF displayed in the Record Definition File drop-down list.

If an RDF that contains a missing mandatory field is loaded into the Viewer and a user tries to open a record in Single Spell, the user will be presented with the same warning message. If “Yes” is selected, the user is taken to the RDF editor. If “No” is selected, the user is still taken to the Single Spell screen, but this will be blank except for the Record Definition File drop-down list, which will be populated with the file name of the invalid RDF.

## Viewer

In the Viewer, where an appropriate RDF and file is selected, an input record can be loaded into Single Spell by double-clicking on a line of data within the Viewer window.

Alternatively, a user can now right-click on a relevant line of data in the Viewer window and select “Open in single spell”.

## GUI output logs

The output log windows on the Single Spell, RDF and Viewer windows have been removed.

## Drop-down lists

The drop-down boxes on the Batch, Single Spell, RDF and Viewer windows have been increased to store the last eight files selected rather than the last seven files selected.

## About window

A fix has been implemented on the About window to ensure that when the Grouper window is minimised, the text on the screen is appropriately truncated.

## Navigation pane

The hyperlink on the Grouper logo within the left-hand navigation pane has been removed as this was duplicate functionality.

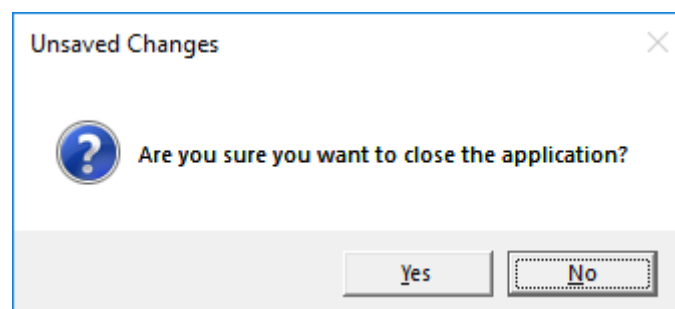
## Closing windows

The Grouper now has window closure functionality on the Batch, Single Spell, RDF, Viewer and About windows.

## Closure prompt box

A closure prompt box has been introduced to stop the application from being closed accidentally where a user has made updates within the Grouper application.

Where a user has made changes within the application and the “x” icon at the top right corner of a window is selected, the following closure prompt box will be presented:



Selecting “Yes” will close the Grouper application, and selecting “No” will close the prompt box and return the user to the Grouper application.

The following change has been made to the installation files:

### Sample test data

The sample test data file that is installed as part of the Grouper installation has been renamed from “HRG4+ Non Admitted Care Sample Test Data” to “HRG4+ Non-Admitted Consultations Sample Test Data” to align with the current Grouper database naming convention.

## Grouper Algorithm Changes

### Additional Code to Group types

The redesign of Subchapter **JB Burns Procedures and Disorders** has resulted in the creation of two new Code to Group Types.

- Core 7 burns logic – Enables a second- or third-degree burn diagnosis code, recorded in any position, to take precedence over all standard Core 1 procedure-driven and primary diagnosis-driven logic and Core 5 global exception logic. Only Core 4 multiple trauma logic will take precedence over Core 7 burns logic, although record validation and Unbundling continue to precede Core 4 logic.
- Core 3 escalation logic – Enables escalation to a higher resource HRG to take place by using the base dummy HRG roots JB91-98 (derived via Core 7 burns logic).

Further details, including flow diagrams, are available in the Chapter Summaries document.

### Removal of HRG Precedence

With the redesign of Subchapter **JB Burns Procedures and Disorders**, it is no longer necessary to use HRG-level precedence lists, e.g. **HRG\_P\_Prec**, to determine the appropriate core HRG. These lists have, therefore, been deleted from the HRG design.

### Expansion of DataltemID use

The redesigned Subchapter **JB Burns Procedures and Disorders** utilises Discharge method and Discharge destination (DataltemID = DISMETH and DISDEST, respectively).

Similarly, the redesign of the cardiac transplant HRGs within Subchapter **ED Open Cardiac Procedures for Acquired Conditions** uses Discharge method.

## HRG Design Changes

### Update of base design

The design base for the HRG4+ 2019/20 Local Payment Grouper is the HRG4+ 2016/17 Reference Costs design, updated to include the OPCS-4.8 release, which came into effect April 2017.

As with the HRG4+ 2018/19 Local Payment Grouper, the HRG4+ 2019/20 Local Payment Grouper relies on the 5<sup>th</sup> edition of the ICD-10 classification.

## Increase in the number of HRGs

The net number of HRGs has increased by 50 from 2,782 in the HRG4+ 2018/19 Local Payment Grouper to 2,832 in the HRG4+ 2019/20 Local Payment Grouper. Net movements in the numbers of HRGs at subchapter level can be found in Appendix A.

## Deletion of Subchapter FZ Digestive System Procedures and Disorders and creation of new digestive system subchapters

Having reached maximum capacity, Subchapter **FZ Digestive System Procedures and Disorders** could no longer accommodate any new HRGs. To enable the creation of new digestive system HRGs to better reflect expected resource use, and to align this subchapter with other subchapters in HRG4+, Subchapter **FZ Digestive System Procedures and Disorders** has been deleted and replaced with the following three subchapters:

- Subchapter **FD Digestive System Disorders**
- Subchapter **FE Digestive System Endoscopic Procedures**
- Subchapter **FF Digestive System Open and Laparoscopic Procedures**

With the exception of the creation of new HRGs for bariatric surgery, as detailed in Appendix A (and in the Chapter Summaries), there has largely been a transfer of old to new HRGs, meaning that although each HRG code in these subchapters is new, the label and content matches a predecessor HRG from Subchapter **FZ Digestive System Procedures and Disorders**.

## Changes to support updated national coding guidance in Subchapter WJ Infectious Diseases and Immune System Disorders

Following updated coding guidance relating to sepsis (April 2017, April 2018), the majority of national activity that previously mapped to **WJ05\* Septic Shock** HRGs would now only do so if coding guidance is not adhered to.

As a result, the five ICD-10 codes that previously mapped to HRG root **WJ05 Septic Shock** have been remapped to different HRG roots, and HRGs **WJ05A Septic Shock with CC Score 5+** and **WJ05B Septic Shock with CC Score 0-4** have been deleted, as insufficient activity remained in the HRGs for these to be viable.

## Changes to the Neonatal Critical Care HRG Design Content

Changes have been made to the NCC HRG design to include the 14 new Critical Care Activity Codes (CCACs) introduced in Version 2.0 (2016) of the Neonatal Critical Care Minimum Data Set (see SCCI Information Standard 0075 for further information; <https://digital.nhs.uk/data-and-information/information-standards/information-standards-and-data-collections-including-extractions/publications-and-notifications/information-standards-notices-2016>).

Although these new CCACs may be used in the Local Grouper to generate the appropriate HRG, they cannot be flowed centrally within the Commissioning Data Sets (CDS). Please refer to the SCCI Information Standard 0075 for further information.

## Changes to the Paediatric Critical Care HRG Design Content

Changes have been made to the PCC HRG design to include the 6 new Critical Care Activity Codes (CCACs) introduced in Version 2.0 (2016) of the Paediatric Critical Care Minimum Data Set (see SCCI Information Standard 0076 for further information; <https://digital.nhs.uk/data-and-information/information-standards/information-standards-and-data-collections-including-extractions/publications-and-notifications/information-standards-notices-2016>).

data-collections-including-extractions/publications-and-notifications/information-standards-notices-2016).

Although these new CCACs may be used in the Local Grouper to generate the appropriate HRG, they cannot be flowed centrally within the CDS. Please refer to the SCCI Information Standard 0076 for further information.

## Updated logic and lists

### Update to harvest code logic

There is specific coding guidance regarding the recording of harvest codes in OPCS-4 (Y54.- to Y69.-). Harvest codes have been removed from the global approach code list, ensuring that logic that requires a related approach or site code will only use the approach and site codes associated with the dominant procedure, not those related to the harvest procedure associated with the dominant procedure.

### Update to procedure hierarchy values

As a result of the redesign of several subchapters and the remapping of various clinical codes, the procedure hierarchy (PH) value of some clinical codes has been amended.

### Update to Interventions list

The **Interventions** list has been updated to include all procedure codes to which maximum length of stay logic has been applied and to delete those codes from which length of stay logic has been removed.

### Update to multiple-procedure escalation lists

As a result of the redesign of several subchapters, the remapping of various clinical codes and the creation of combination codes, and various lists used in multiple-procedure logic have been reviewed and updated.

## General enhancements

HRG labels and descriptions have been amended to help clarify content and for consistency.

## Deletion of Same Day Emergency Care (SDEC) Best Practice Tariffs

The 19 Same Day Emergency Care (SDEC) best practice flags in the design for the HRG4+ 2018/19 Local Payment Grouper have been deleted from the HRG4+ 2019/20 Local Payment Grouper to align the HRG design with current tariff policy proposals.

## Change to Programme Budgeting Category (PBC) code mappings

Programme Budgeting Category (PBC) code mappings have been updated in the HRG design for the HRG4+ 2019/20 Local Payment Grouper to mirror those implemented in the design for the HRG4+ 2018/19 Local Payment Grouper.

## General enhancements

The following cosmetic changes have been made to the design:

- Documentation flag descriptions and list descriptions have been amended for consistency.
- The order of simple flags within various documentation flags have been amended for consistency.

Further details of subchapter-specific changes can be found in the Chapter Summaries document that accompanies the HRG4+ 2019/20 Local Payment Grouper release.

## Appendix A: HRG Distribution by Subchapter

The following table includes a high-level description of design changes implemented in the HRG4+ 2019/20 Local Payment Grouper by subchapter as well as HRG distribution by subchapter in the HRG4+ 2019/20 Local Payment Grouper compared to the HRG4+ 2018/19 Local Payment Grouper. For further details of all changes to HRG subchapters, please see the supporting documentation for the HRG4+ HRG4+ 2019/20 Local Payment Grouper, including the Code to Group Excel workbook and the Chapter Summaries document, available on the National Casemix Office website at <https://digital.nhs.uk/services/national-casemix-office/downloads-grouper-and-tools>.

Changes made to the design of one HRG subchapter may have a significant impact on HRG grouping within other subchapters. This is especially true where changes have been made to procedure hierarchy values. Likewise, global design changes may impact HRG grouping within a subchapter even where no changes have been made to the subchapter itself.

Subchapter	P19/20	P18/19	Comment
AA Nervous System Procedures and Disorders	101	98	<p>Redesign of Subchapter <b>WD Treatment of Mental Health Patients by Non-Mental Health Service Providers</b> has remapped treatment of Alzheimer's disease and vascular dementia patients from this subchapter to combined dementia HRGs in Subchapter WD, and remapped sleep disorder patients from Subchapter WD to this subchapter to more appropriately reflect treatment. As a result, one HRG for Alzheimers disease or dementia has been deleted and two HRGs for adult patients treated for sleep disorders created, resulting in a net increase of one HRG.</p> <p>Two new HRGs created specific to specialised intracranial telemetry.</p> <p>Logic amended on procedure codes mapping to base HRG root <b>AA54 Intermediate Intracranial Procedures, 19 years and over</b>, ensuring paediatric activity appropriately maps to HRG root <b>AA56 Minor or Intermediate, Intracranial Procedures, 18 years and under</b>.</p> <p>Logic amended to ensure primary diagnosis relating to complication or adjustment of neurostimulator with secondary diagnosis indicating the device has been inserted for treatment of faecal or urinary incontinence or for pain management now groups to appropriate HRGs in Subchapters <b>FF Digestive System Open and Laparoscopic Procedures, LB Urological and Male Reproductive System Procedures and Disorders</b> and <b>AB Pain Management</b>.</p>
AB Pain Management	13	13	<p>No change to HRG number or labels</p> <p>Additional logic ensures complication or adjustment of neurostimulator for pain management now rightly maps to this subchapter.</p>

Subchapter	P19/20	P18/19	Comment
BZ Eyes and Periorbita Procedures and Disorders	94	94	<p>No change to HRG number or labels</p> <p>OPCS-4 procedure code classifying corneal implants for keratoconus remapped in line with NICE recommendations and to better reflect expected resource use.</p> <p>Logic for procedures mapped to HRG roots <b>BZ54 Major, Orbit or Lacrimal Procedures, 19 years and over</b> or <b>BZ83 Very Major Vitreous Retinal Procedures, 19 years and over</b> amended to ensure that paediatric activity maps to HRG roots <b>BZ55 Very Major or Major, Orbit or Lacrimal Procedures, 18 years and under</b> and <b>BZ85 Very Major or Major, Vitreous Retinal Procedures, 18 years and under</b>, respectively.</p>
CA Ear, Nose, Mouth, Throat and Neck Procedures	120	120	<p>No change to HRG number or labels</p> <p>Combination code classifying endoscopic cricopharyngeal myotomy created and mapped in line with NICE recommendations; OPCS-4 procedure code classifying replacement of temporomandibular joint remapped in line with NICE recommendations and to reflect expected resource use.</p>
CB Ear, Nose, Mouth, Throat and Neck Disorders	12	12	<p>No change to HRG number or labels</p> <p>ICD-10 diagnosis codes remapped to support Subchapter <b>JB Burns Procedures and Disorders</b> redesign (for burns or corrosions of mouth and pharynx).</p>
CD Dental and Orthodontic Procedures	23	23	No change to HRG number or labels
DZ Thoracic Procedures and Disorders	176	176	<p>No change to HRG number or labels</p> <p>Combination code <b>W92.5 Other examination of joint+Rib</b> removed as a significant procedure for Core 1 (standard) grouping.</p> <p>Three combination codes classifying endobronchial coil and valve procedures deleted and replaced by two new combination codes following an update to clinical coding and NICE guidance for these procedures; these procedures continue to map to HRG root <b>DZ66 Complex Therapeutic Bronchoscopy</b>.</p>
EB Cardiac Disorders	48	48	No change to HRG number or labels

Subchapter	P19/20	P18/19	Comment
EC Open and Interventional Procedures for Congenital Heart Disease	21	21	<p>No change to HRG number or labels</p> <p>New combination codes classifying various transcatheter valve-in-valve implantation procedures created and mapped to reflect NICE guidance and expected resource use.</p> <p>OPCS-4 procedure code <b>L13.5 Percutaneous balloon angioplasty of pulmonary artery NEC</b> remapped to this subchapter from Subchapter <b>EY Interventional Cardiology for Acquired Conditions</b>, irrespective of age or diagnosis of patient, to reflect that this procedure is almost exclusively performed to treat patients with congenital heart disease.</p> <p>OPCS-4 procedure codes classifying implantation or renewal of biventricular pacemaker procedures remapped to better reflect additional expected resource over and above single or dual pacemakers.</p>
ED Open Cardiac Procedures for Acquired Conditions	48	46	Cardiac transplant HRGs redesigned to more appropriately accommodate bridge-to-transplant activity and complexity of different types of transplant surgery, leading to a net increase of two HRGs. As a result of this redesign, heart transplant and implantation of ventricular assist device HRGs no longer include age splits.
EY Interventional Cardiology for Acquired Conditions	65	65	<p>Attention to / removal of pacemaker or cardioverter defibrillator HRGs redesigned to separately identify complex extraction procedures from simple explantation procedures, with no net change in number of HRGs.</p> <p>To support NICE guidance for transcatheter valve-in-valve implantation, new combinations codes created and mapped to the TAVI HRGs.</p> <p>OPCS-4 procedure code <b>L13.5 Percutaneous balloon angioplasty of pulmonary artery NEC</b> remapped from this subchapter to Subchapter <b>EC Open and Interventional Procedures for Congenital Heart Disease</b>, irrespective of age or diagnosis of patient, to reflect that this procedure is almost exclusively performed to treat patients with congenital heart disease.</p> <p>CC logic has been amended.</p>
FZ Digestive System Procedures and Disorders	0	202	Subchapter FZ retired and replaced with new Subchapters <b>FD Digestive System Disorders</b> , <b>FE Digestive System Endoscopic Procedures</b> and <b>FF Digestive System Open and Laparoscopic Procedures</b> (detailed below).
FD Digestive System Disorders	54	0	<p>Formed from a straight lift-and-shift of the 54 digestive system disorders HRGs previously within Subchapter <b>FZ Digestive System Procedures and Disorders</b>.</p> <p>ICD-10 diagnosis codes remapped to support Subchapter <b>JB Burns Procedures and Disorders</b> redesign (for burns or corrosions of the oesophagus and alimentary tract).</p>

Subchapter	P19/20	P18/19	Comment
FE Digestive System Endoscopic Procedures	37	0	<p>Formed from a lift-and-shift of 37 digestive system endoscopic procedure HRGs previously within Subchapter <b>FZ Digestive System Procedures and Disorders</b>.</p> <p>HRG for endoscopic bariatric procedures deleted as part of redesign of bariatric procedure HRGs within Subchapter <b>FF Digestive System Open and Laparoscopic Procedures</b>.</p>
FF Digestive System Open and Laparoscopic Procedures	112	0	<p>Formed from a lift-and-shift of 112 digestive system open and laparoscopic procedure HRGs previously within Subchapter <b>FZ Digestive System Procedures and Disorders</b>.</p> <p>Four HRGs specific to the treatment of obesity deleted and replaced with five new HRGs specific to the treatment of obesity to better reflect expected resource use.</p> <p>One combination code deleted following an update to NICE guidance for implantation of a duodenal–jejunal bypass sleeve for managing obesity.</p> <p>Identification of abdominal wall transplantation (plus escalation) improved.</p> <p>Logic applied to insertion or renewal of neurostimulator or neurostimulator electrode procedures amended to ensure patients treated for faecal incontinence group to a faecal incontinence HRG in this subchapter.</p> <p>List membership of escalation lists <b>FF_Major</b> and <b>FF_Major_Obesity</b> updated to ensure multiple-procedure escalation logic performs as intended.</p>
GA Hepatobiliary and Pancreatic System Open and Laparoscopic Procedures	27	26	<p>Subchapter renamed to clarify it contains both open and laparoscopic procedures.</p> <p>Hepatobiliary and pancreatic transplant HRGs redesigned to more appropriately accommodate complexity of different types of transplant surgery, e.g. pancreas transplant, leading to a net increase of one HRG; also incorporates escalation for transplantation of abdominal wall.</p> <p>HRG labels have been amended.</p> <p>List membership of escalation list <b>G_VeryMajor</b> updated to ensure multiple-procedure escalation logic performs as intended.</p>
GB Hepatobiliary and Pancreatic System Endoscopic Procedures	14	14	No change to HRG number or labels
GC Hepatobiliary and Pancreatic System Disorders	24	24	No change to HRG number or labels

Subchapter	P19/20	P18/19	Comment
HC Spinal Procedures and Disorders	74	74	No change to HRG number or labels. Escalation logic applied to revisional percutaneous procedures on intervertebral disc updated. Combination code <b>W92.5 Other examination of joint+Spine</b> removed as a significant procedure for Core 1 (standard) grouping.
HD Musculoskeletal Disorders	35	35	No change to HRG number or labels
HE Orthopaedic Disorders	84	84	No change to HRG number or labels
HN Orthopaedic Non-Trauma Procedures	111	110	New HRG created specific to high cost device / procedure, <b>HN87Z Very Complex Orthopaedic Procedures with Massive Endoprosthesis</b> , resulting in a net increase of one HRG. Harvest code logic amended. Combination codes with a driving code of <b>W81.7 Insertion of therapeutic spacer into joint</b> remapped to better reflect expected resource use. List membership of orthopaedic trauma list <b>H_Trauma</b> updated to ensure orthopaedic trauma activity groups to the appropriate HRG. Combination codes with a driving code of <b>W92.5 Other examination of joint</b> (hip, knee etc) removed as a significant procedure for Core 1 (standard) grouping. OPCS-4 procedure code <b>A67.1 Cubital tunnel release</b> remapped from shoulder to elbow procedure HRGs.
HT Orthopaedic Trauma Procedures	87	87	No change to HRG number or labels Harvest logic amended. Combination codes with a driving code of <b>W81.7 Insertion of therapeutic spacer into joint</b> remapped to better reflect expected resource use. List membership of orthopaedic trauma list <b>H_Trauma</b> updated to ensure orthopaedic trauma activity groups to the appropriate HRG. Combination codes with a driving code of <b>W92.5 Other examination of joint</b> (hip, knee etc) removed as a significant procedure for Core 1 (standard) grouping.
JA Breast Procedures and Disorders	35	35	No change to HRG number or labels

Subchapter	P19/20	P18/19	Comment
JB Burns Procedures and Disorders	38	12	Complete redesign of subchapter, including deletion of all JB Burns HRGs and replacement with 38 new HRGs, resulting in a net increase of 26 HRGs, to better reflect the severity, treatment and care of burns patients. The new JB HRGs take into account the degree, total body surface area, and location of burn, as well as patient age, complications and comorbidities, and whether any interventions have been undertaken, utilising new Core 7 burns logic and concomitant Core 3 escalation logic.
JC Skin Surgery	12	12	No change to HRG number or labels
JD Skin Disorders	10	10	No change to HRG number or labels
KA Endocrine System Disorders	18	18	No change to HRG number or labels
KB Diabetic Medicine	12	12	No change to HRG number or labels
KC Metabolic Disorders	9	9	No change to HRG number or labels
LA Renal Procedures and Disorders	48	48	No change to HRG number or labels
LB Urological and Male Reproductive System Procedures and Disorders	149	149	<p>No change to HRG number or labels</p> <p>Logic applied to insertion or renewal of neurostimulator or neurostimulator electrode procedures amended to ensure patients treated for urinary incontinence group to the appropriate HRGs in this subchapter.</p> <p>Grouping logic applied to one combination code amended to ensure all codes mapped to HRG root <b>LB26 Intermediate Endoscopic, Prostate or Bladder Neck Procedures (Male and Female)</b> as a base have the same grouping logic.</p> <p>Documentation flag description of flag <b>LB_Int_End</b> amended to ensure description accurately describes logic applied.</p>
LD Renal Dialysis for Chronic Kidney Disease	26	26	No change to HRG number or labels
LE Renal Dialysis for Acute Kidney Injury	4	4	No change to HRG number or labels

Subchapter	P19/20	P18/19	Comment
MA Female Reproductive System Procedures	48	48	No change to HRG number or labels Combination codes created for better recognition of procedures undertaken to treat female genital mutilation. OPCS-4 codes classifying gynaecology examinations removed as a significant procedure for Core 1 (standard) grouping.
MB Female Reproductive System Disorders	17	17	No change to HRG number or labels
MC Assisted Reproduction Medicine	11	10	HRG <b>MC06Z Collection of Sperm</b> deleted and replaced with two new HRGs ( <b>MC20Z Surgical Extraction of Sperm</b> and <b>MC21Z Collection of Sperm</b> ) to reflect expected resource difference between surgical and manual extraction, resulting in a net increase of one HRG.
NZ Obstetric Medicine	55	56	HRG <b>NZ73Z Fetal Ultrasound or Other Related Fetal Interventions</b> deleted, resulting in a net decrease of one HRG. OPCS-4 codes classifying obstetric ultrasound procedures that previously mapped to NZ73Z remapped to either <b>NZ21Z Ante-Natal Standard Routine Ultrasound Scan</b> or <b>NZ22Z Ante-Natal Specialised Non-Routine Ultrasound Scan</b> , depending on the nature of the scan. The labels of these HRG roots / HRGs amended to more accurately reflect the activity captured.  OPCS-4 code <b>U20.6 Fetal echocardiography</b> remapped from NZ73Z to <b>EC21Z Complex Echocardiogram for Congenital Heart Disease</b> .
PB Neonatal Disorders	20	20	No change to HRG number or labels
PC Paediatric Ear Nose and Throat Disorders	4	4	No change to HRG number or labels
PD Paediatric Respiratory Disorders	24	24	No change to HRG number or labels
PE Paediatric Cardiology Disorders	12	12	No change to HRG number or labels
PF Paediatric Gastroenterology Disorders	17	17	No change to HRG number or labels
PG Paediatric Hepatobiliary Disorders	3	3	No change to HRG number or labels
PH Paediatric Rheumatology Disorders	4	4	No change to HRG number or labels

Subchapter	P19/20	P18/19	Comment
PJ Paediatric Dermatology Disorders	7	7	No change to HRG number or labels
PK Paediatric Diabetology, Endocrinology and Metabolic Disorders	11	11	No change to HRG number or labels
PL Paediatric Renal Disorders	10	10	No change to HRG number or labels
PM Paediatric Haematological-Oncology Disorders	14	14	No change to HRG number or labels
PN Paediatric Non-Malignant Haematological Disorders	9	9	No change to HRG number or labels
PP Paediatric Ophthalmic Disorders	2	2	No change to HRG number or labels
PQ Paediatric Immune System Disorders	2	2	No change to HRG number or labels
PR Paediatric Nervous System Disorders	22	22	No change to HRG number or labels
PT Paediatric Mental Health Disorders	4	4	No change to HRG number or labels
PV Paediatric Trauma Medicine	7	7	No change to HRG number or labels
PW Paediatric Infectious Diseases	15	15	No change to HRG number or labels
PX Paediatric Medicine	46	46	No change to HRG number or labels
RD Diagnostic Imaging Procedures	47	46	New "empty core" HRG, <b>RD97Z Admission or Attendance for Diagnostic Imaging</b> , created for patients specifically admitted or attending for diagnostic imaging (TFC 812 Diagnostic Imaging) where an unbundled diagnostic imaging procedure code is recorded, resulting in a net increase of one HRG.

Subchapter	P19/20	P18/19	Comment
RN Nuclear Medicine Procedures	69	68	New "empty core" HRG, <b>RN97Z Admission or Attendance for Nuclear Medicine</b> , created for patients specifically admitted or attending for diagnostic imaging (TFC 812 Diagnostic Imaging) where an unbundled nuclear medicine procedure code is recorded, resulting in a net increase of one HRG.
SA Haematological Procedures and Disorders	104	99	Blood transfusion HRGs redesigned to more appropriately accommodate current clinical practice, including differentiation of automated red cell exchange from manual red cell exchange, and to acknowledge differences in resource use associated with different types of blood products. Two HRGs deleted and replaced by seven new HRGs, leading to a net increase of five HRGs. Combination code created to classify automated red cell exchange, and mapped to its own HRG.
SB Chemotherapy	18	18	No change to HRG number or labels
SC Radiotherapy	30	30	No change to HRG number or labels
SD Specialist Palliative Care	10	10	No change to HRG number or labels
UZ Undefined Groups	1	1	No change to HRG number or labels New U Error category, <b>UZ15 Burns Error</b> , created for activity where burns primary diagnosis code of unspecified body region or unspecified total body surface area (TBSA) is recorded, or where a burns diagnosis code is recorded, in any position, with no subsequent TBSA code present.
VA Multiple Trauma	24	24	No change to HRG number or labels
VB Emergency Medicine	12	12	No change to HRG number or labels <i>Note that the input data required to generate the appropriate VB* HRGs continues to be based on the contents of Commissioning Data Set 010 Accident and Emergency rather than CDS 011 Emergency Care (ECDS) – see Chapter Summary for further information regarding mapping</i>
VC Rehabilitation	23	23	No change to HRG number or labels

Subchapter	P19/20	P18/19	Comment
WD Treatment of Mental Health Patients by Non-Mental Health Service Providers	9	3	<p>Subchapter WD completely redesigned to more closely align with current clinical practice, resulting in a net increase of six HRGs:</p> <p>Sleep disorders remapped to new specific HRGs in Subchapter <b>AA Nervous System Disorders</b>;</p> <p>New HRG created specific to Alzheimer's disease and dementia, with some codes being remapped to this HRG from Subchapter AA;</p> <p>Acute alcohol and drug intoxication, certain signs and symptoms and congenital conditions involving developmental disorders, e.g. Down syndrome, remapped from this subchapter to existing or new HRGs in Subchapter <b>WH Poisoning, Toxic Effects, Special Examinations, Screening and Other Healthcare</b>;</p> <p>Remaining WD mental health – treated by a non-specialised mental health service provider – HRGs now differentiated by type of disorder, in line with ICD-10 diagnosis code definitions.</p>
WF Non-admitted Consultations	8	8	No change to HRG number or labels
WH Poisoning, Toxic Effects, Special Examinations, Screening and Other Healthcare Contacts	68	64	Four new HRGs created specific to the treatment of acute drug and alcohol intoxication to accommodate activity previously mapped to Subchapter <b>WD Treatment of Mental Health Patients by Non-Mental Health Service Providers</b> , resulting in a net increase of four HRGs.
WJ Infectious Diseases and Immune System Disorders	38	40	Two HRGs deleted, <b>WJ05A Septic Shock with CC Score 5+</b> and <b>WJ05B Septic Shock with CC Score 0-4</b> , to support updated coding guidance for severe sepsis and septic shock, leading to a net decrease of two HRGs.
XA Neonatal Critical Care	6	6	<p>No change to HRG number or labels</p> <p>HRG design updated for new CCACs as a result of updated NCCMDS (2016):</p> <p>Logic for person weight, gestation length and person age (days) ranges used in grouping updated.</p> <p>All cases of "yesterday" logic removed.</p> <p>Use of Critical Care Unit Function as a qualifying factor in the HRG design expanded to cover more CCACs.</p> <p>Existing CCACs remapped to existing HRGs to better reflect expected resource use and clinical practice (note some are now Critical Care Unit Function-specific- see Chapter Summary Flow Diagrams for further details).</p>

Subchapter	P19/20	P18/19	Comment
XB Paediatric Critical Care	9	9	<p>No change to HRG number or labels</p> <p>HRG design updated for new CCACs as a result of updated PCCMDS (2016):</p> <p>New logic added so that <b>XB06Z Paediatric Critical Care, Intermediate Critical Care</b> cannot be generated for more than 90 consecutive days on which the dominant CCAC for grouping is <b>52 Invasive ventilation via tracheostomy tube</b>.</p> <p>New logic added so that <b>XB06Z Paediatric Critical Care, Intermediate Critical Care</b> cannot be generated for more than 90 consecutive days on which the dominant CCAC for grouping is <b>53 Non-invasive ventilatory support</b>.</p> <p>Logic resulting in escalation to a higher expected resource HRG on the day a patient dies removed.</p> <p>Existing CCACs remapped to existing HRGs to better reflect expected resource use and clinical practice.</p> <p>ICD-10 isolation list expanded.</p>
XC Adult Critical Care	7	7	No change to HRG number or labels
XD High Cost Drugs	58	58	No change to HRG number or labels
YA Neurological Imaging Interventions	11	10	New HRG created specific to mechanical thrombectomy, <b>YA13Z Percutaneous Transluminal, Embolectomy or Thrombolysis, of Intracranial or Extracranial Blood Vessel</b> , per NICE guidance, leading to a net increase of one HRG.
YD Thoracic Imaging Interventions	5	5	No change to HRG number or labels
YF Gastrointestinal Imaging Interventions	8	8	No change to HRG number or labels
YG Hepatobiliary and Pancreatic Imaging Interventions	16	16	No change to HRG number or labels. Two combination codes classifying irreversible electroporation (IRE) procedures deleted and replaced by two new combination codes following an update to clinical coding and NICE guidance for these procedures; the procedures will continue to map to HRG root <b>YG01 Percutaneous Ablation of Lesion of, Liver or Pancreas</b> .
YH Musculoskeletal Imaging Interventions	8	8	No change to HRG number or labels
YJ Breast Imaging Interventions	12	12	No change to HRG number or labels

Subchapter	P19/20	P18/19	Comment
YL Urological Imaging Interventions	8	8	No change to HRG number or labels
YQ Vascular Open Procedures and Disorders	60	60	No change to HRG number or labels
YR Vascular Imaging Interventions	58	58	No change to HRG number or labels Logic amended to ensure insertion of bioabsorbable stents into peripheral blood vessels maps to the appropriate HRG following a review of NICE guidance.

## The Documentation Suite

Below is a list of the various documents which are available to download from the National Casemix Office website: <https://digital.nhs.uk/services/national-casemix-office/downloads-groupers-and-tools>.

This documentation suite provides a comprehensive resource intended to help users understand HRG design concepts and logic as well as use the Grouper.

- The **Casemix Companion** is a starting point and general reference guide for anyone interested in learning about the casemix classification system used by the NHS in England. This document provides an introduction to HRGs, groupers, HRG4+ design concepts and grouping logic, and it contains links to additional resources.
- The **Grouper User Manual** provides instructions on how to prepare and group data using the Grouper software application. Sample data with expected results is provided. This document is updated with every grouper release.
- The **Summary of Changes** document provides an overview of the main differences between the current grouper design and its relevant predecessor.
- The **Chapter Summaries** document provides an overview of the scope, composition and relevant grouping logic of individual HRG subchapters, and it highlights significant changes made in the latest HRG design.
- The **Code to Group Workbook** is an Excel workbook that embodies the casemix design. It provides details of the constituent elements that contribute to HRG grouping, and it contains reference data such as the ICD-10 and OPCS-4 codes utilised in the design, the procedure and diagnosis hierarchies pertinent to a specific design, and the Complication and Comorbidities (CC) lists for HRG subchapters. The workbook also includes information on Programme Budgeting Category (PBC) mapping as well as a comprehensive list of HRG codes and labels.
- The **Best Practice Guide** is a spreadsheet that contains details about how the grouper allocates specific identification flags relating to best practice. Best Practice Flags usually result in an adjustment to the tariff. The spreadsheet also provides details of these specific tariff adjustments.